Data Miner 2

Swapna Kanury
Tech Change Forum
June 20, 2017
Data Miner 2 will become the central data repository and interface for PJM public data.

**Key Product Features**
- Unified / highly available interface for all PJM public data
- APIs available for system to system integrations
- Metadata available
Timeline

<table>
<thead>
<tr>
<th>Q2 2017</th>
<th>Q3 2017</th>
<th>Q4 2017</th>
<th>Q1 2018</th>
<th>Q2 2018</th>
<th>Q3 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Miner 2</td>
<td>Data Miner 2</td>
<td>Data Miner 2</td>
<td>Data Miner 2</td>
<td>Data Miner 2</td>
<td>Data Miner 2</td>
</tr>
</tbody>
</table>

**Data Miner 2**

- Beta Testing (18 feeds): May 15
- Feedback due: Jul 31
- Go Live - Phase 1: August 14
- 5 min LMP
- Begin Phased Retirements

Legend

- Start Date
- End Date
Future Plans

- Demo sessions will be setup for API Developer Portal / UI.
- Integration with Account Manager – Currently available in Beta
- Enhanced visualization possible in future based on member feedback and interests.
- More data will be available via Data Miner, with increased reliability, performance and ease-of-use.
- Existing flat files will be retired approximately one year after Go Live. Targeting Q3 2018 to begin retiring existing pjm.com postings.
Technical Features

• Similar look and feel to Data Miner
• Data Miner hosted on Microsoft Azure Cloud Platform
  – Filtering, Pagination and Sorting
  – Data Dictionary Search
• RESTful web API services
• Supports multiple Data Formats
  – JSON
  – XML
• Versioning
<table>
<thead>
<tr>
<th>Feed Name</th>
<th>Categorization</th>
<th>Short Name</th>
<th>Current URL</th>
<th>DM2 URL [Beta Only]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Short Name</td>
<td>Current URL</td>
<td>DM2 URL [Beta Only]</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Short Name</td>
<td>Current URL</td>
<td>DM2 URL [Beta Only]</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------</td>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Daily cleared INCs, DECs, and UTCs(XLS)</td>
<td>Bid and Offers Data</td>
<td>day_inc_dec_utc</td>
<td><a href="http://www.pjm.com/markets-and-operations/energy.aspx">URL</a></td>
<td><a href="https://dataminer2-train.pjm.com/feed/day_inc_dec_utc/definition">URL</a></td>
</tr>
<tr>
<td>Pricing Nodes</td>
<td>Reference Data</td>
<td>Pnode</td>
<td>N/A</td>
<td><a href="https://dataminer2-train.pjm.com/feed/pnode/definition">URL</a></td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Short Name</td>
<td>Current URL</td>
<td>DM2 URL [Beta Only]</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>Seven-Day Load Forecast</td>
<td>Load Forecast</td>
<td>load_frcstd_7_day</td>
<td><a href="http://www.pjm.com/markets-and-operations/energy/real-time/7-day-load-forecast.aspx">http://www.pjm.com/markets-and-operations/energy/real-time/7-day-load-forecast.aspx</a></td>
<td><a href="https://dataminer2-train.pjm.com/feed/load_frcstd_7_day/definition">https://dataminer2-train.pjm.com/feed/load_frcstd_7_day/definition</a></td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Short Name</td>
<td>Current URL</td>
<td>DM2 URL [Beta Only]</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------</td>
<td>------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Short Name</td>
<td>Current URL</td>
<td>DM2 URL [Beta Only]</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Short Name</td>
<td>Current URL</td>
<td>DM2 URL [Beta Only]</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Current URL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------------------</td>
<td>----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Current URL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seven-Day Load Forecast</td>
<td>load_frcstd_7_day</td>
<td><a href="http://www.pjm.com/markets-and-operations/energy/real-time/7-day-load-forecast.aspx">http://www.pjm.com/markets-and-operations/energy/real-time/7-day-load-forecast.aspx</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Current URL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------</td>
<td>-----------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical PJM Synchronized Reserve Events</td>
<td>sync_reserve_events</td>
<td><a href="http://www.pjm.com/markets-and-operations/ancillary-services.aspx">http://www.pjm.com/markets-and-operations/ancillary-services.aspx</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJM Historical Regulation Market Data</td>
<td>reg_market_results</td>
<td><a href="http://www.pjm.com/markets-and-operations/ancillary-services.aspx">http://www.pjm.com/markets-and-operations/ancillary-services.aspx</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation outage for Seven days by type</td>
<td>gen_outages_by_type</td>
<td><a href="http://www.pjm.com/markets-and-operations/ops-analysis.aspx">http://www.pjm.com/markets-and-operations/ops-analysis.aspx</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load Forecasts (Historical)</td>
<td>load_frcstd_hist</td>
<td><a href="http://www.pjm.com/markets-and-operations/ops-analysis.aspx">http://www.pjm.com/markets-and-operations/ops-analysis.aspx</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily cleared INCs, DECs, and UTCs</td>
<td>day_inc_dec_utc</td>
<td><a href="http://www.pjm.com/markets-and-operations/energy.aspx">http://www.pjm.com/markets-and-operations/energy.aspx</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Current URL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed Name</td>
<td>Categorization</td>
<td>Current URL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>------------------</td>
<td>----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation Fuel Mix</td>
<td>gen_by_fuel</td>
<td><a href="http://www.pjm.com/markets-and-operations.aspx">http://www.pjm.com/markets-and-operations.aspx</a> - The pie chart that is present at this location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Uplift By Zone</td>
<td>day_uplift</td>
<td><a href="http://www.pjm.com/markets-and-operations/energy/uplift-data.aspx">http://www.pjm.com/markets-and-operations/energy/uplift-data.aspx</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


• API Guide

• Data Miner 2 Support
  – Please Contact: DataMiner2Support@pjm.com